

### Abstract

The present invention relates to water-soluble, mono-, di- and multi-metallic metal-oxide colloids as well as to a method for preparing the same and to their fixation on a solid support. This method is characterized in that the targeted synthesis of soluble metal-oxide colloids is achieved by the controlled hydrolysis of a noble metal precursor in the presence of a water-soluble stabilizer. The metal-oxide colloids can be reduced according to the needs into corresponding metal colloids. The fixation of the nanoparticles on the solid support can be carried out both at the oxidized or reduced state of said nanoparticles.

09831566-051001